





DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

OVERSIGHT OF
DEFENSE FINANCE AND ACCOUNTING SERVICE
CORPORATE DATABASE DEVELOPMENT

Report No. D-2001-030

December 28, 2000

Office of the Inspector General Department of Defense

20010108 040

DTIC QUALTRY INSPECTED 3

AQI 01-04-07/0

Additional Copies

To obtain additional copies of this audit report, visit the Inspector General, DoD, Home Page at: www.dodig.osd.mil/audit/reports or contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8923.

Suggestions for Audits

To suggest ideas for or to request audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@dodig.osd.mil; or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

ASD(C3I) Assistant Secretary of Defense (Command, Control,

Communications, and Intelligence)

DCD Defense Finance and Accounting Service Corporate Database
DCII Defense Finance and Accounting Service Corporate Information

Infrastructure

DFAS Defense Finance and Accounting Service

GAFS-R General Accounting and Finance System - Redesign

ITOIPT Information Technology Overarching Integrated Product Team USD(Comptroller) Under Secretary of Defense (Comptroller/Chief Financial

Officer)



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-2884

December 28, 2000

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE

(COMPTROLLER/CHIEF FINANCIAL OFFICER)

ASSISTANT SECRETARY OF DEFENSE (COMMAND,
CONTROL, COMMUNICATIONS, AND
INTELLIGENCE)
DIRECTOR, DEFENSE FINANCE AND ACCOUNTING
SERVICE

SUBJECT: Audit Report on Oversight of Defense Finance and Accounting Service Corporate Database Development (Report No. D-2001-030)

We are providing this report for review and comment. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. The Under Secretary of Defense (Comptroller/Chief Financial Officer) comments were partially responsive. We request additional comments from the Under Secretary of Defense (Comptroller/Chief Financial Officer) on recommendation 2a. We request that the Under Secretary of Defense (Comptroller/Chief Financial Officer) provide these comments to us by February 28, 2001.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Ms. Kimberley A. Caprio at (703) 604-9139 (DSN 664-9139) (kcaprio@dodig.osd.mil) or Mr. Eric L. Lewis at (703) 604-9144 (DSN 664-9144) (elewis@dodig.osd.mil). See Appendix E for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman Assistant Inspector General for Auditing

Office of the Inspector General, DoD

Report No. D-2001-030 (Project No. D2000FG-0051)

December 28, 2000

Oversight of Defense Finance and Accounting Service Corporate Database Development

Executive Summary

Introduction. This audit was conducted in support of financial statement audits required by the Chief Financial Officers Act of 1990, as amended by the Federal Financial Management Act of 1994 and the Federal Financial Management Improvement Act of 1996. The Defense Finance and Accounting Service (DFAS) has initiated a strategy to bring finance and accounting systems into compliance with the laws and financial management in DoD. The DFAS Corporate Information Infrastructure is designed to achieve standardization in financial reporting. The DFAS Corporate Database is a central database that will allow accounting and finance information to be available simultaneously to many users and applications. The database should eliminate storage of multiple instances of data as well as inefficiencies and reconciliation processes that can result when data are passed back and forth between applications. The DFAS Corporate Database should incrementally integrate DFAS system initiatives while minimizing change to legacy applications. The DFAS Corporate Database is required to attain the full benefits associated with initiatives such as the Defense Procurement Payment System, Defense Standard Disbursing System, Defense Cash Accountability System, and Defense Departmental Reporting System. These benefits are a standard system for the business areas and a single database to store information.

Objectives. The overall objective of the audit was to review development of the DFAS Corporate Database and its impact on entitlement, disbursing, and accounting functions. This report is the first in a series related to the DFAS Corporate Database. Specifically, this report discusses DoD oversight of DFAS development of the DFAS Corporate Information Infrastructure, DFAS Corporate Database, and associated applications. The review of the management control program as it relates to the overall objective will be discussed in a subsequent report.

Results. There was high risk that DoD would not be able to achieve its goal of a single, integrated system, because management was focused on individual systems and system ownership is fragmented among many DoD Components. A more integrated management approach was needed. For details of the audit results, see the Finding section of the report.

Summary of Recommendations. We recommend that the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) complete and publish guidance on portfolio management; enforce compliance with the technical infrastructure model and DFAS Corporate Information Infrastructure for finance, accounting, and feeder systems; and perform assessments of compliance with the Defense Finance and Accounting Service Corporate Information Infrastructure for reviews of DoD finance, accounting and feeder systems. We also recommend that the Under Secretary of Defense (Comptroller/Chief Financial Officer) complete guidance to implement the 1999 Financial Management Improvement Plan; establish a process to identify systems that do not meet cost review thresholds; and enforce consolidation, standardization, and integration of DoD finance and accounting requirements. We further recommend that the Director, Defense Finance and Accounting Service, justify the reasons why systems under development were not designed or modernized to comply with the Defense Finance and Accounting Service Corporate Information Infrastructure.

Management Comments. The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) agreed to issue, in coordination with the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), guidance for the review of finance, accounting and feeder systems. Additionally, the Assistant Secretary agreed to conduct, in coordination with the Under Secretary of Defense (Comptroller/Chief Financial Officer), systems reviews using the technical infrastructure model defined in the Financial Management Improvement Plan and the DFAS Corporate Information Infrastructure as criteria. The Under Secretary of Defense (Comptroller/Chief Financial Officer) stated that the Financial Management Improvement Plan requires DoD to integrate implementation of financial and feeder systems, and includes critical finance, accounting, and feeder systems, regardless of their cost-review threshold. Additionally, the Under Secretary of Defense (Comptroller/Chief Financial Officer) agreed to reference the appropriate DoD Directives when the Memorandums of Agreement are established. Finally, the Under Secretary explained that crosswalks will be used to translate nonstandard system data to be compliant with the DFAS Corporate Information Infrastructure until modernization and reengineering efforts are complete. A complete discussion of the management comments is in the Finding section of the report, and the entire text of management comments, can be found in the Management Comments section of the report.

Audit Response. The comments from the Assistant Secretary were responsive. The Assistant Secretary agreed to complete and publish guidance on portfolio management, and conduct systems reviews for compliance with the technical infrastructure model and the DFAS Corporate Information Infrastructure. Comments from the Under Secretary were partially responsive. We remain concerned that there will be insufficient emphasis on implementing an integrated management approach as quickly as possible. We look forward to helping the Department adapt the Financial and Feeder System Compliance Process and acquisition review process toward that end, but action is needed now. We request that the Under Secretary provide additional comments on how he plans to accelerate the implementation of this approach during the remainder of FY 2001. We request that the Under Secretary provide comments on this report by February 28, 2001.

Table of Contents

Executive Summary	i
Introduction	
Background Objectives	1 2
Finding	
Integrating DoD Financial Management Systems	3
Appendixes	
 A. Audit Process Scope Methodology Prior Coverage B. Financial Systems Requirements C. Technical Infrastructure Model D. Description of Systems E. Report Distribution 	16 18 18 19 22 24 30
Management Comments	
Office of the Under Secretary of Defense (Comptroller/Chief Financial Officer) Office of the Assistant Secretary of Defense (Command, Control	32 35

This audit was conducted in support of financial statement audits required by the Chief Financial Officers Act of 1990, as amended by the Federal Financial Management Act of 1994, and the Federal Financial Management Improvement Act of 1996. This report is one in a series related to the Defense Finance and Accounting Service (DFAS) Corporate Database (DCD), and discusses DoD oversight management of the DCD, DFAS Corporate Information Infrastructure (DCII), and the associated applications. Subsequent reports will discuss DCII and DCD life-cycle management, implementation of data standardization, and information assurance.

Background

Congress and the General Accounting Office have cited concerns with financial management within DoD. In addition, DoD must comply with several statutory requirements, including Office of Management and Budget Circular No. A-127, "Financial Management Systems," July 23, 1993, which requires each DoD agency establish a single, integrated financial management system.

Congressional Concerns with DoD Financial Management. The House Appropriations Committee reported in the DoD Appropriations Bill for FY 2000 that the Committee was disappointed with the current level of DoD oversight of its information technology systems. According to the report, DoD information technology projects have tended to overrun budgets, slip schedules, evade data standardization and interoperability requirements, and shortchange user needs. In addition, the Appropriations Conference Committee Report 106-754, "Making Appropriations for the Department of Defense for the Fiscal Year Ending September 30, 2001, and For Other Purposes," July 17, 2000, terminated the Services' funding for the Defense Joint Accounting System as a result of ineffective oversight. DFAS can continue the program with its own funds subject to the Congressional scrutiny.

General Accounting Office Concerns with DoD Financial Management. The General Accounting Office expressed concerns about the state of DoD financial management systems. In the General Accounting Office Testimony 99-93, "Defense Information Management: Continuing Implementation Challenges Highlight the Need for Improvement," February 25, 1999, the General Accounting Office stated that DoD faces a number of serious management challenges, including a lack of effective management and oversight controls, technical and data standardization, and measuring performance. Further, the General Accounting Office stated that DoD had taken only preliminary steps to resolve financial management concerns. Since inception of the Chief Financial Officers Act, DoD has been unable to receive a favorable opinion on all but one of its major financial statements, due in part to the inability to audit nonstandard data because of noncompliant financial and feeder systems.

Office of Management and Budget Financial Management System Guidance. Office of Management and Budget Circular No. A-127 prescribes policies and standards for Federal Agencies to follow in developing and operating financial management systems. Each agency must establish and maintain a single, integrated financial management system that complies with accounting principles, internal control standards, and applicable Office of

Management and Budget and U.S. Treasury requirements. The circular defines a single, integrated financial management system as a unified set of financial, mixed and feeder systems that are planned for and managed together, operated in an integrated fashion, and linked together electronically to provide agency-wide financial system support. For a complete summary of Federal and DoD financial system requirements, see Appendix B.

Implementation of DoD Financial Improvements. Responsibility for implementing financial improvements is shared among the Under Secretary of Defense (Comptroller/Chief Financial Officer) (USD[Comptroller]), DFAS, and the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD[C³I]). The USD(Comptroller) and DFAS are responsible for developing and maintaining finance and accounting systems, and the ASD(C³I) is responsible for the acquisition of automated information systems.

USD(Comptroller/Chief Financial Officer) Responsibilities. DoD Directive 5118.3, "Under Secretary of Defense (Comptroller) Chief Financial Officer, Department of Defense," January 6, 1997, requires the USD(Comptroller) to develop and maintain an integrated DoD accounting and financial management system.

Accounting Service," November 26, 1990, established DFAS as a Defense Agency under the USD(Comptroller). DFAS is required to direct consolidation, standardization, and integration of DoD finance and accounting requirements, functions, procedures, operations, and systems. According to the directive, DoD Components are required to comply with DFAS direction and maintain control of accounting and finance resources (feeder systems).

ASD(C³I) Responsibilities. DoD Directive 5137.1, "Assistant Secretary of Defense for Command, Control, Communications, and Intelligence," February 12, 1992, requires the ASD(C³I) establish and implement information management policy, processes, programs, and standards to govern the development, acquisition, and operation of DoD automated information systems.

Objectives

The overall objective of the audit was to review development of the DFAS Corporate Database and its impact on entitlement, disbursing, and accounting functions. The specific objective of this review was to evaluate DoD oversight of DFAS development of the DCII, DCD, and associated applications. The review of the management control program, as it related to the overall objective, will be discussed in a subsequent report. This report is the first in a series of reviews of the DCD program. See Appendix A for a discussion of the audit scope, methodology, and prior audit coverage.

Integrating DoD Financial Management Systems

DFAS would not be able to achieve its goal of a single, integrated system¹ under the existing DCD systems development process. The risk was high because:

- the DoD management and oversight process focuses on individual systems rather than comprehensive oversight of interdependent systems and processes.
- the DFAS owned only 48 of the 168 critical DoD finance, accounting, and feeder systems that provide financial management data.

As a result, DoD could not be sure that development of the DFAS Corporate Information Infrastructure, the DFAS Corporate Database, and other financial management, accounting, and feeder systems will:

- Succeed in creating a single, integrated financial management system to achieve the DoD goals outlined in the 1999 Financial Management Improvement Plan and comply with statutory requirements:
- Standardize DoD business processes; reduce the number of finance, accounting, and feeder systems; reduce costs, and improve mission area visibility, and produce reliable, accurate and auditable financial information.

DoD Efforts to Improve Financial Management

To address financial management concerns and Office of Management and Budget Circular No. A-127 requirements, DoD outlined an approach in its 1999 Financial Management Improvement Plan. The approach is based on an infrastructure model that can reduce the number of financial systems and facilitate standardization of information systems.

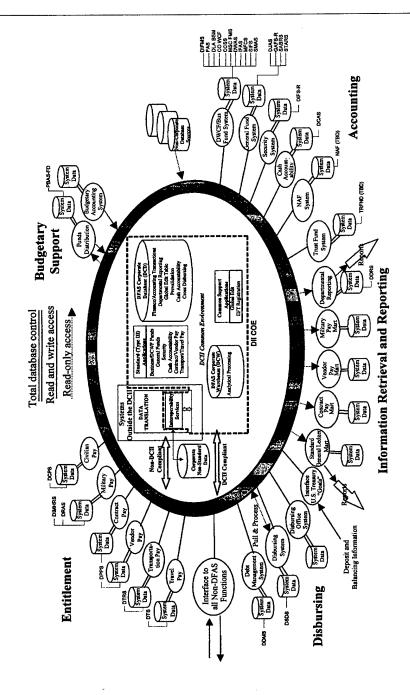
¹A single integrated system can be a system of systems based upon the same standards; however, it would be expensive to immediately transform the systems of a large organization, such as DoD, to reflect a single standard. Therefore, DFAS is developing the DCII as a single integrated architecture that would accommodate data sharing with a myriad of the Services' feeder systems that are based on different standards. For example, the Services are purchasing management information systems based upon commercial standards which requires DFAS to ensure that financial data produced from those systems is compliant with the DCII.

Technical Infrastructure Model. The technical infrastructure model reduces the number of crosswalks² between interdependent systems by requiring all systems in the infrastructure share a common data structure, use the standard fiscal code as the single line of accounting, and follow standard business rules. Use of the technical infrastructure model will enable DoD to comply with Office of Management and Budget Circular No. A-127 by reducing the need to translate or crosswalk data between systems. See Appendix C for a detailed explanation of the technical infrastructure model.

Development of DCII and DCD. To meet Office of Management and Budget Circular No. A-127 requirements, DFAS developed a strategy to implement the technical infrastructure model and consolidate and standardize finance and accounting into a single, integrated financial management system. The DCII is the cornerstone of this effort. The DCII is an integrated collection of procedures, policies, and standards that provide centralized management, analysis, and reporting of data; information security; and data transfer and translation capabilities. The DCII is an integrated environment and major components include the DCD, the DFAS Corporate Warehouse, the DFAS Corporate Repository, and DCII-compliant finance and accounting applications. A diagram of the proposed DCII systems and applications in the FY 2005 Finance and Accounting Environment is provided on page 5. See Appendix D for a description of the systems and applications.

DFAS Corporate Database. When implemented, DCD will make accounting and finance information available to many users and applications at the same time. Approximately eighty percent of the data in DCD will originate from feeder systems, and the remainder will originate from DFAS systems. The DCD will eliminate storage of multiple instances of data as well as the inefficiencies and reconciliation processes that can result when data are passed back and forth between applications. DFAS stated that by integrating the entitlement, disbursing, and accounting data, the DCD should eliminate unmatched disbursements, negative unliquidated obligations, and the time delays associated with prevalidation. As an example, the Standard Procurement System will transmit contract data to the DCD, at which time the DCD will post the obligation and send the information to the accounting system and Defense Procurement Payment System. Invoices and receiving reports will be sent for payment authorization by way of the DCD to the Defense Procurement Payment System. When complete, the Defense Procurement Payment System transmits the disbursement information to the DCD, which transmits the information to the Defense Standard Disbursing Systems and the appropriate accounting system. Therefore, the DCD will be the hub of DoD contractual transactions and should keep the entitlement, disbursing, and accounting systems in balance.

²A crosswalk is a computer program that translates Service-unique data into a standard DoD format. DCD uses tables to convert the data. A crosswalk is necessary when systems that need to share information are developed based upon different data structures, lines of accounting, and business rules. The crosswalk translates the data from one system to the other so that they can communicate.



Expected FY 2005 DFAS Finance and Accounting Environment

DFAS Corporate Warehouse. The DFAS Corporate Warehouse is a historical database that will store and manage official DFAS information for analysis and generation of operational reports and queries. All official reports will be generated from the DFAS Corporate Warehouse. Data in the DFAS Corporate Warehouse will originate from the DCD and feeder systems.

DFAS Corporate Repository. The DFAS Corporate Repository is a centrally managed, shared corporate repository. The repository will allow for storage, retrieval, and maintenance of DFAS corporate tools, models, applications, and reusable software modules to standardize system development. Since the DCII will be fielded in increments (releases) over several years, this repository will allow for software reuse and standardization during development.

DCII Applications. DCII applications are systems built for specific business functions that meet the specifications defined by the DCII architecture. An example of this is the Defense Standard Disbursing System, which is being developed to be the standard disbursing system for DoD. The Defense Standard Disbursing System will interface with DCD using standard business rules and data, but no crosswalks, as defined by the DCII specifications. Another system being developed within the DCII is the Defense Procurement Payment System, intended to be the standard contract and vendor payment system.

Costs for DCII and DCD. Total costs for the DCII have not been identified at this time. The DCII has multiple releases spanning several years; however, out-year functional requirements have not been finalized and costs cannot be identified at this time. The estimated program cost for the DCD and the warehouse is expected to be approximately \$46 million. The DCD program received Milestone 0 approval in May 1999 and should be completed by 2007.

Achieving Integrated Financial Management

Requirements for DCII Success. Development of DCII and DCD represents a positive step toward developing an integrated financial management system and meeting Office of Management and Budget Circular No. A-127 requirements. The DCII is a comprehensive approach to identifying and reviewing financial weaknesses throughout DoD via data standardization and system integration. To be successful, however, DoD must provide integrated management and oversight of DCII and DCD to include:

- identification and inclusion of all necessary finance, accounting, and feeder systems that support the DCII;
- coordination among owners of finance, accounting, and feeder systems to ensure that common business rules are applied for interoperability; and
- conformance to data standardization requirements such as common data elements, standard fiscal code, and standard business rules.

Potential for DCII Success. DFAS will not be able to achieve the goal of a single integrated system, including the use of standard data and business rules, under the existing DoD systems development process. This is because the

present DoD management and oversight of systems does not require comprehensive oversight that includes interdependent systems and processes. Specifically,

- DoD management and oversight process focuses on individual systems rather than oversight of interdependent systems and processes, and
- DFAS owns only 48 of the 168 critical DoD finance, accounting, and feeder systems that provide financial management data.

Management and Oversight Process. At present, oversight at the DoD level for information technology systems under development is performed on an individual system-by-system basis by an Information Technology Overarching Integrated Product Team (ITOIPT). Further, such oversight is generally limited to systems that exceeded cost thresholds or are deemed to be of special interest.³

Overarching Integrated Product Team. The ITOIPT is a review board headed by ASD(C³I) and may include participants from the USD(Comptroller); the Joint Staff; the Director, Operational Test and Evaluation; the Director, Program Analysis and Evaluation; the Director, Acquisition Program Integration; and user representatives. The ITOIPT provides DoD-level oversight and makes recommendations on systems under development. The ITOIPT accomplishes this by periodically reviewing system documents including system requirements, the mission need statements, analyses of alternatives, and economic analyses. Based upon the documentation, the ITOIPT recommends approval for a system to proceed through milestone decision points including initiating an acquisition, initiating development, or deploying the system.

Selection Criteria for Overarching Integrated Product Team System Reviews. DoD Regulation 5000.2, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems Acquisition Programs," May 11, 1999, permits the aggregation of multiple components as a major system for ITOIPT consideration. However, to date, the ASD(C³I) has chosen to review systems individually. The ASD(C³I) selects systems for ITOIPT oversight based on cost criteria or because of a special interest by DoD or Congress. The ITOIPT provides oversight to approximately 71 individual DoD systems and initiatives.

Because of the selection criteria, some systems that support the DCII are being developed without the DoD-wide oversight. For example, critical systems being developed to support the DCII include DCD, the Defense Procurement Payment System and the Defense Standard Disbursing System. Of those systems, only Defense Procurement Payment System meets the cost threshold to be considered a major system. DCD and the Defense Standard Disbursing System do not meet the cost threshold and therefore do not receive any ITOIPT oversight during

³DoD Regulation 5000.2, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems Acquisition Programs," May 11, 1999, requires the ASD(C³I) to provide oversight to systems that exceed \$360 million in life-cycle costs in FY 1996 dollars. Additionally, the ASD(C³I) can provide oversight to systems that it deems are special interest regardless of cost thresholds.

development and implementation. In addition, because ITOIPT oversight is system-oriented, DCD, the Defense Procurement Payment System, the Defense Standard Disbursing System, and DCII are not being addressed in the aggregate at the DoD level.

Ownership of Feeder Systems. Systems under development within the DCII will facilitate improved financial statements and financial management by using standard data and standard business rules. However, the majority of finance and accounting data that will populate the DCII and supporting systems will originate from feeder systems. The DoD 1999 Financial Management Improvement Program identified a total of 168 critical financial management systems, of which DFAS owns 48. The remaining 120 systems are owned by the Military Services and Defense Agencies. Consequently, DFAS does not control the data, nor does it control the development or modernization of over 70 percent of the identified critical systems. Therefore, unless they choose to, the Military Services and Defense Agency systems do not have to conform to DCII standards. DoD Directive 5118.5 requires that DoD Components comply with DFAS direction regarding standardization, consolidation, and integration of DoD finance and accounting requirement, functions, procedures, and systems. However, DFAS is not in the position to mandate their compliance. The Military Services and Defense Agencies, including DFAS, are expending millions of dollars to modernize systems that may not comply with DCII data standards for several years.4

In addition to the feeder systems, DFAS owns the four major general fund accounting systems, of which only the General Accounting and Finance Systems - Redesign (GAFS-R) is currently being developed DCII compliant. The table on the next page identifies the four general fund accounting systems under development or modernization.

General Accounting and Finance System – Redesign (GAFS-R). DFAS is redesigning GAFS at an investment cost of \$42 million to support general fund accounting requirements and to be compliant with Chief Financial Officer Act requirements. DFAS is working with the Air Force to develop GAFS-R to also comply with DCII requirements. GAFS-R is being developed DCII-compliant and is expected to be functional by the end of FY 2002. Until the redesign is completed, the nonstandard data within legacy GAFS must be "crosswalked" or translated into a DCII-compliant format. Crosswalk development and maintenance can become cumbersome and expensive.

DFAS anticipates that at least 80,000 crosswalks will be necessary for GAFS. Once GAFS-R is DCII compliant, and until the feeder systems to GAFS-R are also compliant, then crosswalks will have to be accomplished to translate data from the subordinate systems to the major feeder systems such as GAFS-R.

⁴Since implementation of the DCII will not be complete for several years, DFAS acknowledges the need to continue non-DCII compliant modernization efforts of feeder systems until the DCII concept of operations is demonstrated. In the interim, crosswalks will be developed to transfer non-standard data from the feeder systems to DCII compliant systems.

⁵Chief Financial Officer requirements include auditable financial statements.

General Fund Accounting Systems Under Development or Modernization (in millions of dollars)			
<u>System</u>	Program Cost	DCII Compliant	Expected Compliance
Defense Joint Accounting System	\$238	No	restructured
General Finance and Accounting System - Redesign (GAFS-R)	42	Yes	FY 2001
Standard Accounting, Budgeting and Reporting System	41	No	FY 2004
Standard Accounting and Reporting System	102	No	FY 2006

Defense Joint Accounting System. DFAS has been developing the Defense Joint Accounting System since 1995 as the single accounting system for the Army and select Defense Agencies at an expected program cost of\$238 million. The Defense Joint Accounting System met the criteria to receive ITOIPT level oversight. Under the current development plan, the Defense Joint Accounting System is being developed using nonstandard data and transactions. DFAS plans to reengineer the Defense Joint Accounting System to be DCII-compliant in FY 2005. In a previous report on the Defense Joint Accounting System, we questioned the adequacy of the ITOIPT review. The House Appropriations Committee also questioned the adequacy of the Defense Joint Accounting System oversight because the system will not be used for DoD accounting. Subsequently, the FY 2001 Defense Authorization Act required the Secretary of Defense to certify to the House and Senate Armed Services Committees that the Defense Joint Accounting System meets user needs, complies with DoD acquisition standards, and complies with the Clinger-Cohen Act prior to issuing a Milestone III decision. The future direction of this system remained under review as of December 2000.

Other General Fund Accounting Systems. The Standard Accounting, Budgeting, and Reporting System is the Marine Corps general funds system and the Standard Accounting and Reporting System is the Navy general fund system. Both are currently operational systems that are undergoing modernization. Both systems are expected to have modernization completed and be operational by June 2001. As of April 2000, remaining program costs were \$4 million each.

Value of Comprehensive Oversight. The current DoD-wide oversight process will not provide for a comprehensive assessment of critical elements of DCII. Specifically, the current process does not provide for the identification and assessment of all systems that are critical to the DCII including non-DFAS owned feeder systems either individually or in the aggregate. Further, the current oversight process does not facilitate or ensure coordination among system owners to ensure compliance with common business rules or data standardization to facilitate interoperability.

Effect of Present Oversight on DCII and DCD

Because DoD lacks a mechanism to provide comprehensive oversight of interrelated systems within an infrastructure such as DCII, critical DCII-related systems may not receive the necessary visibility, either individually or in conjunction with the other critical systems within DCII. As a result, DoD cannot be sure that the development of the DCII, DCD, and other financial management, accounting, and feeder systems will lead to the development of an integrated financial management system, as planned.

However, with an effective and comprehensive process to manage and oversee multiple, interdependent systems and processes, a single integrated financial management system could be developed. Both the ASD(C³I) and USD(Comptroller) have initiated steps to address the need for comprehensive management and oversight.

ASD(C³I) Initiatives to Address Portfolio Oversight. The ASD(C³I) recognized the limitation of the existing oversight process and the need to have visibility during development over the interrelated systems within a business process. As early as 1998, the ASD(C³I) recognized the need to consider systems development in a portfolio. In July 1998, the ASD(C³I) issued a memorandum stating that during the following 6 to 12 months, the ITOIPT would transition from focusing on reviews of individual systems to looking horizontally across "portfolios" of information technology investments. Portfolios would be established by grouping information technology investments by mission–related or administrative processes. Further, as part of portfolio oversight, trade-offs among investments would be made to maximize benefits to the mission and the benefits measured and evaluated in the context of the overall strategy for the mission. ASD(C³I) officials envision that portfolio management will be an ongoing, collaborative process, performed by stakeholder teams representing all life-cycle activities, and driven by mission outcomes and contribution to the mission.

The transition to portfolio management remains incomplete. In 1999, the ASD(C³I) initiated draft guidance on portfolio management and oversight. As of August 2000, however, the ASD(C³I) continues to work on the guidance that remains in draft. ASD(C³I) personnel stated the guidance will address Clinger-Cohen Act requirements and DoD life-cycle management requirements, which includes a review of mission needs, system alternatives, operational requirements, and performance measures. ASD(C³I) personnel stated that, in addition to program-specific life-cycle documents, portfolio-based, capstone

life-cycle documents should be used to help managers effectively review information technology investments. The ASD(C³I) has invited DoD Principal Staff Assistants and representatives from the Military Services, Defense agencies, and the Inspector General to participate in teams to improve and finalize the draft guidance.

Finance and Accounting Portfolio. In addition to developing guidance on portfolio management, the ASD(C³I) acknowledged that the DoD functional area of finance and accounting may be a good candidate for portfolio management. ASD(C³I) officials stated that since DCD and other DCII applications are the catalyst for DoD financial transactions and reporting, this is a compelling case for comprehensive portfolio oversight to account for the numerous systems that are now dependent upon each other regardless of system cost. Program Analysis and Evaluation officials within the USD(Comptroller) further supported the recommendation that the first portfolio should be composed of critical finance, accounting, and feeder systems. It should be expected that some systems will be in several portfolios because they are in multiple functional areas, such as finance and logistics.

USD(C) Initiatives. The USD(Comptroller) is responsible for the development and management of finance and accounting systems as well as developing and maintaining an integrated financial management system within DoD. As such, the USD(Comptroller) will be primarily responsible for identifying the critical systems to establish the portfolio(s) for finance and accounting. USD(Comptroller) continues to develop comprehensive oversight policy for financial management systems. According to USD(Comptroller) officials, the policy should implement the 1999 Financial Management Improvement Program, which sets the foundation for a single, integrated financial management system.

Adequacy of Efforts to Date. We commend ASD(C³I) for initiating the portfolio management and oversight process to provide better mission area visibility for information systems. We also commend DFAS for initiating development of the DCII and DCD to initiate integration of DoD finance, accounting, and feeder systems. However, until portfolio oversight and management is actively performed, DoD cannot be assured that the DCII, DCD, and other financial management, accounting, and feeder systems will succeed in creating an integrated financial management system to achieve the DoD goals outlined in the 1999 DoD Financial Management Improvement Program or meet Office of Management and Budget Circular No. A-127 requirements. Further, DoD cannot be assured that DoD business processes will be standardized; the number of finance, accounting, and feeder systems will be reduced; costs will be reduced; or mission area visibility will be improved. Additionally, with the aggregation of systems under review, DoD will be able to maximize the value of

investments and ensure that the systems meet the Clinger-Cohen Act requirement that systems are developed, maintained, and used effectively to provide financial or performance data for financial statements.

More specifically, without such oversight, ASD(C³I), the USD(Comptroller), and DFAS cannot:

- assess compliance and enforce the use of standard business rules and standard data elements such as standard lines of accounting;
- facilitate reviews of all viable options and costs for existing and planned systems and reduce duplication;
- identify and potentially reduce the need for crosswalks between DCII and non-compliant systems, and;
- assess the effect of schedule slippage on interdependent systems and new initiatives.

Remaining Efforts Needed. To expedite and implement portfolio management over DCII, the stakeholders need to take actions to complete guidance on portfolio management and oversight, enforce compliance with standardization requirements, and establish finance, accounting, and feeder system portfolio(s) to include all critical systems. Specifically, both the ASD(C³I) and USD(Comptroller) need to complete guidance on portfolio management. In addition, as the DoD organization responsible for implementing information management policy, processes and standards, the ASD(C3I) should enforce and monitor compliance with the technical infrastructure model as part of portfolio management and oversight. To facilitate comprehensive oversight of the DCII, the USD(Comptroller), in cooperation with the ASD(C³I), should establish a DCII portfolio to include critical finance, accounting and feeder systems. The Year 2000 approach could be used to help develop the portfolios. For example, DoD used the Year 2000 approach to identify systems critical to DoD operations. A similar approach can be used to build portfolios based upon their importance to DoD. According to DoD Directives 5118.3 and 5118.5, the USD(Comptroller), as the DoD Chief Financial Officer, is responsible for developing and maintaining an integrated DoD accounting and financial management system, while DFAS is responsible for directing standardization and integration requirements and procedures. As such, the USD(Comptroller) must assist DFAS in enforcing DFAS standardization requirements throughout DoD, to include the DoD Components.

In addition, as part of the portfolio process, the ASD(C³I) and USD(Comptroller), should examine the cost effectiveness and appropriateness of the current development of non-DCII compliant systems that will feed DCII. This effort should include other general fund accounting systems.

Recommendations, Management Comments, and Audit Response

- 1. We recommend that the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence):
- a. Establish a date for completion and publish guidance on portfolio management to include consideration of Federal regulations and DoD requirements.

Management Comments. The Assistant Secretary of Defense (Command Control, Communications and Intelligence) agreed in principle that portfolio management guidance was necessary; however, he stated that such guidance will be included in the DoD 5000 series rather than separately. Specifically, the Assistant Secretary will work with the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) to develop procedures for family of systems reviews to be included in DoD Instruction 5000.2. DoD Regulation 5000.2-R will also be updated to include procedures for family of systems and mission area reviews. Further, overarching guidance for portfolio management and oversight will be issued by the end of FY 2001.

b. Perform compliance reviews using the technical infrastructure model on a cost-effective basis for all systems and processes within the finance, accounting, and feeder system portfolio(s).

Management Comments. The Assistant Secretary of Defense (Command Control, Communications and Intelligence) concurred. He will conduct family of systems reviews in coordination with the Under Secretary of Defense (Comptroller/Chief Financial Officer) using the technical infrastructure model and other criteria.

c. Perform assessments of compliance with the Defense Finance and Accounting Service Corporate Information Infrastructure for reviews of DoD finance, accounting, and feeder systems.

Management Comments. The Assistant Secretary of Defense (Command Control, Communications and Intelligence) concurred and stated that, in coordination with the Under Secretary of Defense (Comptroller/Chief Financial Officer), he will assess compliance with the Defense Finance and Accounting Service Corporate Information Infrastructure for reviews of the finance and accounting mission and business areas.

Audit Response. Comments from the Assistant Secretary of Defense (Command Control, Communications and Intelligence) were responsive. The Assistant Secretary agreed to conduct family of systems reviews for compliance with the technical infrastructure model and other criteria in coordination with the Under Secretary of Defense (Comptroller/Chief Financial Officer). Additionally, the Assistant Secretary of Defense (Command Control, Communications and Intelligence) agreed that guidance on portfolio management should be completed and published.

- 2. We recommend that the Under Secretary of Defense (Comptroller/Chief Financial Officer):
- a. Complete guidance implementing the 1999 Financial Management Improvement Plan to include a requirement to use portfolio management.

Management Comments. The Under Secretary of Defense (Comptroller/Chief Financial Officer) stated that the Financial Management Improvement Plan already requires DoD Components to integrate planning, development, modification, enhancement, and implementation of financial and feeder systems. However, the Under Secretary will modify the Financial Management Improvement Plan to reflect additional requirements included in family of systems guidance issued by the Assistant Secretary of Defense (Command Control, Communications and Intelligence).

Audit Response. Comments from the Under Secretary of Defense (Comptroller/Chief Financial Officer) were partially responsive. The Under Secretary agreed to update the Financial Management Improvement Plan to conform to the family of system guidance to be issued by the Assistant Secretary of Defense (Command Control, Communications and Intelligence); however, the opportunity to change the 2000 version of the Plan has just been missed and, if nothing is done until the next iteration of the Plan, the guidance will not be issued until the end of FY or CY 2001. Given that the Defense Finance and Accounting Service Corporate Database and interdependent systems, such as the Defense Procurement Payment System, are presently being developed concurrently, it may not be prudent to delay addressing portfolio management until guidance is published and incorporated into the Financial Management Improvement Plan. Therefore, we request that the Under Secretary of Defense (Comptroller/Chief Financial Officer) provide additional comments on the feasibility of interim guidance.

b. Establish a finance, accounting, and feeder portfolio(s) in coordination with the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) and assist in identification of applicable systems to include critical systems, such as the Defense Finance and Accounting Service Corporate Database, which do not meet cost-review thresholds. The Defense Finance and Accounting Service Corporate Information Infrastructure and Defense Finance and Accounting Service Corporate Database should be central to the portfolio(s).

Management Comments. The Under Secretary of Defense (Comptroller/Chief Financial Officer) stated that the Financial Management Improvement Plan contains critical finance, accounting, and feeder systems regardless of

cost-review thresholds. Upon formal publication of the Assistant Secretary of Defense (Command Control, Communications and Intelligence) guidance on family of systems, the Under Secretary will evaluate such guidance to determine if any changes are needed in the Department's current Financial and Feeder Systems Compliance Process approach to managing its financial and feeder systems on an integrated basis.

Audit Response. Comments from the Under Secretary of Defense (Comptroller/Chief Financial Officer) were generally responsive.

c. Require DoD Components to comply with the Defense Finance and Accounting Service direction on consolidation, standardization, and integration of DoD finance and accounting requirements, functions, procedures, operations, and systems contained in DoD Directive 5118.3, "Under Secretary of Defense (Comptroller/Chief Financial Officer) Chief Financial Officer, DoD," and 5118.5, "Defense Finance and Accounting Service."

Management Comments. The Under Secretary of Defense (Comptroller/Chief Financial Officer) agreed to reference DoD Directives 5118.3 and 5118.5 when the Memorandums of Agreement are established between the Defense Finance and Accounting Service and the owners of the feeder systems under the Department's Financial and Feeder Systems Compliance Process.

Audit Response. Comments from Under Secretary of Defense (Comptroller/Chief Financial Officer) were responsive.

d. Require the Director, Defense Finance and Accounting Service, to show how systems under development or modernization will fit into the Defense Finance and Accounting Service Corporate Information Infrastructure architecture until they are reengineered.

Management Comments. The Under Secretary of Defense (Comptroller/Chief Financial Officer) stated that crosswalks will be utilized to translate nonstandard systems data into a format that is compliant with the Defense Corporate Information Infrastructure until modernization and reengineering of systems are complete. By utilizing crosswalks, data standardization, standard edits, and universal business rules will be implemented, while facilitating crosswalking of data between the Defense Corporate Information Infrastructure Common Environment and legacy systems.

Audit Response. Comments from the Under Secretary of Defense (Comptroller/Chief Financial Officer) were responsive.

Appendix A. Audit Process

Scope

The audit was conducted in support of our financial statement audits required by the Chief Financial Officers Act of 1990, as amended by the Federal Financial Management Act of 1994 and the Federal Financial Management Improvement Act of 1996. The overall objective of the audit was to review development of the DCD and impact on entitlement, disbursing, and accounting functions. This report is the first in a series related to the DCD, and discusses DoD oversight of DFAS development of the DCII, DCD, and associated applications. The review of the management control program as it relates to the overall objective will be discussed as part of a subsequent report. Other reports will address life-cycle management, DoD data standardization, and database security.

The DCII is the infrastructure DFAS designed to achieve data and business process standardization. The DCD is a central database that will allow accounting and finance information to be available simultaneously to many users and applications. The DCD will eliminate storage of multiple instances of data as well as inefficiencies and reconciliation processes that can result when data are passed back and forth between applications. The DCD will incrementally integrate DFAS system initiatives while minimizing change to legacy applications. The DCD is required to attain the full benefits associated with major initiatives such as the Defense Procurement Payment System, Defense Standard Disbursing System, Defense Cash Accountability System, and Defense Departmental Reporting System.

Work Performed. We reviewed the DFAS approach to management and development of the DCII, DCD, and associated applications. We obtained a general understanding of the DFAS standardization efforts such as the Standard Fiscal Code and pro forma entries and how they impact the finance and accounting systems.

The methodology of the review included interviews and analyses of documentation for DCD and other DCII applications. Specifically, we interviewed DFAS, the ASD(C³I), and USD(COMPTROLLER) personnel to obtain a basic understanding of the DCII, DCD, and the proposed DoD portfolio management approach.

DoD-Wide Corporate-Level Government Performance and Results Act Coverage. In response to the Government Performance and Results Act, the Secretary of Defense annually establishes DoD-wide corporate level goals,

subordinate performance goals, and performance measures. This report pertains to achievement of the following goal(s), subordinate performance goal(s), and performance measures:

- FY 2001 DoD Corporate Level Goal 2: Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. (01-DoD-2)
- FY 2001 Performance Measure 2.5.1: Reduce the number of noncompliant accounting and finance systems (01-DoD-2.5.1)
- FY 2001 Subordinate Performance Goal 2.5: Improve DoD financial and information management. (01-DoD-2.5)
- FY 2001 Performance Measure 2.5.3: Qualitative assessment of reforming information technology management. (01-DoD-2.5.3).

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals:

- Financial Management Area. Objective: Consolidate finance and accounting operations. Goals: Consolidate finance and accounting center and field operations, consolidate and standardize financial systems, and reduce and improve accounting systems. (FM-1.1-2 and 2.1-2)
- Financial Management Area. Objective: Reengineer DoD business practices. Goals: Improve data standardization of finance and accounting data items and standardize Budget and Accounting Classification Code structural data elements. (FM-4.4-5)
- Financial Management Area. Objective: Improve management incentives. Goal: Use the Project Management Office for accounting systems to provide centralized management control and oversight for all migratory and interim migratory accounting systems. (FM-7.5)
- Information Technology Management. Objective: Provide services that satisfy customer information needs. Goals: Build architecture and performance infrastructures and modernize and integrate Defense information infrastructure. (ITM-2.1-2)

General Accounting Office High Risk Area. The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Financial Management and Defense infrastructure high-risk areas.

Methodology

Use of Computer-Processed Data. We did not use computer-processed data in this audit.

Audit Period and Standards. We performed this program audit from December 1999 through August 2000. The audit was performed in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

Contacts During the Audit. We visited or contacted individuals and organizations within the DoD. Further details are available upon request.

Prior Coverage

No prior reports on DCD have been completed. The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to financial management issues. The General Accounting Office reports can be accessed on the Internet at http://www.gao.gov. Inspector General, DoD, reports can be accessed on the Internet at http://www.dodig.osd.mil/audit/reports.

Appendix B. Financial Systems Requirements

Chief Financial Officers Act of 1990. The Chief Financial Officers Act of 1990 requires the head of each agency to submit a proposal for reorganizing the agency with respect to the financial management functions to the Director of Office of Management and Budget. Each executive agency is required to prepare annual financial statements for submission to the Director, and an audit must be performed on each financial statement prepared under this act.

Federal Financial Management Act of 1994. The Federal Financial Management Act of 1994 requires that each agency prepare and submit annual audited financial statements on all activities to the Director of Office of Management and Budget.

Clinger-Cohen Act. The Clinger-Cohen Act, formerly the Information Technology Management Reform Act of 1996, requires that the head of each executive agency, in consultation with the Chief Information Officer and the Chief Financial Officer, establish policies and procedures. These policies and procedures are to ensure that the accounting, financial, and asset management systems and other information systems of the executive agency are designed, developed, maintained, and used effectively to provide financial or program performance data for financial statements of the executive agency. The head of each executive agency is also responsible for the design and implementation of a process to maximize the value and manage the risks of information technology acquisitions of the agency.

Federal Financial Management Improvement Act of 1996. The Federal Financial Management Improvement Act of 1996 requires each agency to implement and maintain financial management systems that comply substantially with Federal financial management systems requirements, applicable Federal accounting standards, and the U.S. Government Standard General Ledger at the transaction level.

Office of Management and Budget Circular No. A-127, Financial Management Systems, July 23, 1993. Office of Management and Budget Circular No. A-127 prescribes policies and standards for Federal Agencies to follow for developing and operating financial management systems. Each system must reflect an agency-wide financial information classification consistent with the U.S. Government Standard General Ledger to minimize data redundancy and ensure that consistent information is readily available and provided to internal managers at all levels within the organizations. Office of Management and Budget Circular No. A-127 requires that each agency establish and maintain a single, integrated financial management system that complies with accounting principles, internal control standards, and applicable Office of Management and Budget and U.S. Treasury requirements. The circular defines a single, integrated financial management system as a unified set of financial systems and mixed systems that are planned and managed together, operated in an integrated fashion, and linked electronically to provide agency-wide financial system support.

Office of Management and Budget Circular No. A-130, "Management of Federal Information Resources," February 8, 1996. Office of Management and Budget Circular No. A-130 establishes policy for the management of Federal information resources for all agencies of the executive branch of the Federal government. It also defines a minimum set of controls to be included in Federal automated information security programs.

A cost-benefit analysis for each system shall be prepared and updated as necessary throughout the information life cycle. Post-implementation reviews of information systems should also be conducted to validate the estimated benefits and document effective management practices. Information system management oversight mechanisms shall be utilized to ensure each system meets agency mission requirements.

Information systems should be developed to facilitate interoperability, application portability, and scalability of computerized applications across networks of heterogeneous hardware, software, and communications platforms. Improvements to existing information systems and development of planned information systems must not unnecessarily duplicate information systems available within the same agency or from other agencies. Intra-agency and inter-agency sharing should be conducted, when cost effective, to meet information technology needs before new technology resources are acquired.

A plan for adequate security of each major application should be established and take into account security of all systems within which the application will operate. Specific controls to protect information should be defined, and a summary of the security plan shall be incorporated into the strategic information resource management plan. Security controls should be reviewed when significant modifications are made by an independent audit or self-review at a minimum of every three years.

Joint Financial Management Improvement Program, February 1999. The Joint Financial Management Improvement Program publishes documents to provide overall objectives and strategies for achieving improved financial management.

The financial management system plan shall support the agency's mission and programs, and be incorporated into the agency plans for information technology infrastructure and information systems as a whole. The financial management system must:

- use standardized transactions;
- have the capability to perform integrity checks on batches of data received via interfaces;
- have the capability to process, record and track transactions originating in other systems to provide a basis for central financial control.
 Transactions must be handled consistently, regardless of their point of origin;

- implement controls over the correction and reprocessing of all erroneous transactions by the use of error files or suspense accounts;
- restrict access to authorized users;
- have audit trails that trace transactions from their original input to the financial statements; and
- have an audit trail identifying changes made to system parameters and tables that affect processing or reprocessing of financial transactions;

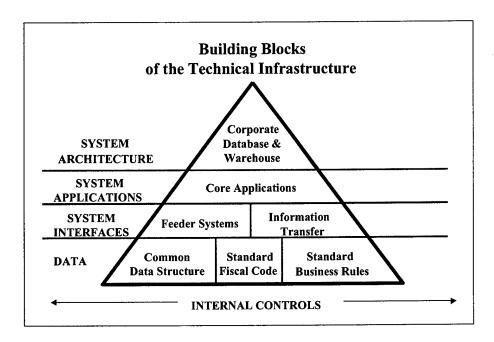
DoD Manual 8320.1, "Data Administration Procedures," March 1994. The purpose of data standardization is to create standard data that can be shared horizontally and vertically. Standard data are developed through the use of approved integrated data models, which involve logically identifying, grouping, and classifying data.

DoD Regulation 5000.2, "Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems Acquisition Programs," May 11, 1999. DoD Regulation 5000.2 defines the process that major automated information systems will follow during the acquisition process. The process encompasses logical phases separated by major decision points called milestones. The regulation allows for tailoring documents, but requires documentation of costs, schedule and performance objectives, and thresholds in an acquisition program baseline for every acquisition program. The performance parameters should be consistent with those in the requirements documentation, and schedule parameters must include program initiation, major milestone decision points, initial operating capability, and other critical system events. Cost parameters must be based on careful assessment of risks and appraisals of the total program, and must also reflect realistic cost estimates.

The level of review is based on the acquisition category. Acquisition Category IA programs are major automated information systems or programs designated by the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD[C³I]) as such. A major automated information system is an acquisition program that is either (1) designated by the ASD(C³I) as a major automated information system, or (2) estimated to require program costs in any single year in excess of \$30 million in FY 1996 constant dollars, total program costs in excess of \$120 million in FY 1996 constant dollars, or total life-cycle costs in excess of \$360 million in FY 1996 constant dollars. For the purpose of determining whether an system is major, the following shall be aggregated and considered a single system: (1) the separate systems that constitute a multi-element program; (2) the separate systems that make up an evolutionary or incrementally developed program; or (3) the separate systems that make up a multi-component automated information system program.

Appendix C. Technical Infrastructure Model

The following chart depicts the technical infrastructure model as defined in the DoD 1999 Financial Management Improvement Program. According to the Financial Management Improvement Program, implementation of the model will provide the proper underlying support from which effective and efficient financial management functions are performed.



Common Data Structure. Using a common data structure means that similar elements in different systems would use the names and attributes available in a standard data dictionary system (for example, the Defense Data Dictionary System). This would reduce the need for crosswalks to translate data between the DFAS Corporate Database (DCD) and other systems that use different names and attributes.

Standard Fiscal Code. The standard fiscal code is the approved DoD single line of accounting. DoD expects that utilizing the standard fiscal code should help provide for comparable financial statements by recording transactions consistently and providing for uniform postings to the general ledger accounts. Presently, DFAS states that the standard fiscal code contains some redundant entries for Army, Navy, and Air Force values. DFAS will continue to refine the standard fiscal code as DFAS Corporate Information Infrastructure (DCII) and DCD development continues and will work with the Services to eliminate the redundant values.

Standard Business Rules. DFAS is currently developing the standard business rules for accounting and finance. Standard business rules ensure that data from different systems are comparable when aggregated. If different DoD Components are allowed to use different business rules, their data may not be comparable because the Components would have made different valuation assumptions. For example, if Component A valued inventory on the last-in, first-out method and Component B valued similar inventory on the first-in, first-out method, the financial statements would be misstated when aggregated. Even if a common data structure and the standard fiscal code were used, without standard business rules, a misstatement would still occur.

DoD Financial Transactions. DFAS owns the core applications, corporate database, and corporate warehouse. Eighty percent of the DoD financial transactions DFAS processes originate from feeder systems, owned by the Services and other Defense Agencies. The financial transactions, official reports, and financial statements, will culminate in the corporate warehouse.

Appendix D. Description of Systems

DCII Entitlement Systems

Defense Procurement Payment System (DPPS). The Defense Procurement Payment System DFAS consolidation and migration initiative will become the standard DoD procurement payment system used to calculate contract and vendor payments, along with grant and other agreement entitlements. Primary sources of data for the Defense Procurement Payment System will be generated from DCD. The consolidation and migration initiative will focus on reengineering business processes, resolving known system deficiencies, and defining standard and shareable financial data for contract and vendor entitlement.

Defense Civilian Pay System (DCPS). The Defense Civilian Pay System is the single, migratory DFAS automated information system that supports civilian payroll operations for the DoD. The major purpose of the Defense Civilian Pay System is to provide compliant, reliable, timely, accurate, and affordable payroll service to the DoD and to provide flexibility and responsiveness for meeting the changing needs of the DoD. The Defense Civilian Pay System will remain as the sole civilian pay system, interfacing with 11 migratory finance and accounting systems.

Defense Integrated Human Resources System (DIMHRS). The Defense Integrated Human Resources System will be a single, fully integrated military personnel and pay system that will support all levels, from field to headquarters.

Defense Retiree and Annuitant Pay System (DRAS). The Defense Retiree and Annuitant Pay System is the migratory DFAS system that establishes, adjudicates, and maintains accounts for DoD military retirees, their former spouses, and garnishment recipients. The system maintains historical payroll information, retirement factors, Survivors Benefit Plan election data, and Federal employment data. The Defense Retiree and Annuitant Pay System will continue as the single retirement pay system.

Defense Transportation Pay System (DTRS). The Defense Transportation Pay System is a migratory DFAS entitlement system used to compute transportation payments for surface freight and personal property/household goods. The Defense Transportation Pay System was designed to standardize and consolidate all transportation payments making maximum use of Electronic Data Interchange processing. Portions of this business area are being transitioned to PowerTrack service, which is run by a commercial bank. The bank will make payments to the commercial carriers, and DFAS will be reimbursed through commercial invoices. The system will track transactions, generate accounting and finance system update records, and will replace the Transportation Support System. Implementation of PowerTrack at transportation offices began in March 1999 and will continue through September 2000.

Defense Travel System (DTS). The Defense Travel System is a seamless, paperless, temporary duty travel system that meets the needs of travelers, commanders, and process owners. The Defense Travel System enables DoD travelers to request travel arrangements electronically from commercial providers, obtain travel authorization and itinerary, and submit final travel claims for approval and computation of entitlement. The Defense Travel System uses the DoD Public Key Infrastructure for digital signature, encrypts sensitive data in accordance with General Accounting Office guidelines, interfaces with DoD accounting and disbursing systems through Electronic Data Interchange, and digitally stores all DoD travel data.

DCII Accounting Systems

Defense Cash Accountability System (DCAS). The Defense Cash Accountability System consolidation initiative is the final migratory system selected by the DFAS to be the single cash accountability system for DoD. Cash accountability is the reporting of disbursements, reimbursements, deposits, and receipts to the U.S. Treasury, as well as the reporting of all other transactions that would affect the status of funds.

Defense Integrated Financial System for Foreign Military Sales – Reengineered (DIFS-R). The Defense Integrated Financial System for Foreign Military Sales - Reengineered is the DFAS migratory system supports the corporate security assistance accounting business area, specifically the Foreign Military Sales program and International Debt Management. Analysis indicates that the Defense Integrated Financial System for Foreign Military Sales - Reengineered will retain 54 percent accounting functionality, and the 46 percent of nonaccounting functionality will migrate to a new system under development by the Defense Security Cooperation Agency. As a result of this analysis, DFAS is reassessing the role (and need) of the Defense Integrated Financial System for Foreign Military Sales - Reengineered in the target architecture.

Defense Joint Accounting System (DJAS). The Defense Joint Accounting System is identified as the DFAS migratory general accounting system for the DFAS-Indianapolis customer base. In the Appropriations Conference Committee Report 106-754, July 17, 2000, the Defense Joint Accounting System was terminated.

GAFS – Redesign (GAFS-R). GAFS-R is the DFAS migratory general fund accounting system for centralized accounting, reporting, analysis, and reconciliation of funds appropriated to, or administered by, the DoD and the Air Force. This initiative will reengineer GAFS to provide a relational database that will operate in an open systems environment for integration with DCD to update a general ledger using the standard chart of accounts and prepare financial statements. This initiative will also install the standard fiscal code, incorporate acquisition accounting functionality, and improve the accounts receivable and reimbursements processes.

Standard Accounting Budgeting and Reporting System (SABRS). The Standard Accounting Budgeting and Reporting System initiative is the DFAS migratory accounting system for the Marine Corps general funds accounting. This initiative will focus on compliance with statutory and regulatory guidance, data integration, and accuracy.

Standard Accounting and Reporting System (STARS). The Standard Accounting and Reporting System is the DFAS-owned migratory accounting system for consolidation of all Department of the Navy general fund accounting, commercial entitlement and reporting operations.

Defense Working Capital Accounting System (DWAS). The Defense Working Capital Accounting System is the DFAS-owned migratory system designed to account for the base operations support activities of the Public Works Centers and Naval Facilities Engineering Service Centers as well as Printing and Publications operations of the Defense Automated Printing Service. Base operations support services extend to a variety of support services, including fuel provision, transportation management, utility delivery and management, material distribution, housing administration, and other support for Navy bases and personnel.

Standard Industrial Fund System (SIFS). The Standard Industrial Fund System is a migratory DFAS system that provides accounting support to the Army depot maintenance business area, which includes depot maintenance facilities and arsenals. The four Standard Industrial Fund System subprocesses are Automated Internal Operating Budget, Cost Accounting and Budget, Financial Inventory Accounting and General Fund, and Methods and Standards.

Material Financial Control System (MFCS). The Material Financial Control System is the DFAS-owned migratory Defense Working Capital Fund system for the Navy Wholesale supply management business area. The Material Financial Control System will be enhanced to satisfy regulatory and statutory requirements, including the Anti Deficiency Act, Chief Financial Officers Act, and requirements of the U.S. Treasury, the Office of Management and Budget, and Congress.

Standard Material Accounting System (SMAS). The Standard Material Accounting System is the DFAS-owned migratory Defense Working Capital Fund system supporting the Air Force retail supply management business area. The system maintains accounting records for fixed assets, inventory, receivables, payables, funds, and management information.

Commodity Command Standard System (CCSS). The Commodity Command Standard System is the standard DFAS migratory financial accounting system for the five inventory control points in the Army Materiel Command. The Commodity Command Standard System accounts for the funds of the Army Working Capital Fund. The system represents the primary wholesale logistics management system in the Army. The Commodity Command Standard System retail process will be replaced by the Army Single Stock Fund.

Military Sealift Command Financial Management System (MSCFMS). The Military Sealift Command Financial Management System is a DFAS migratory system for the Navy transportation business area.

Defense Industrial Financial Management System (DIFMS). The Defense Industrial Financial Management System is a DFAS-owned migratory system that originally belonged to the Naval Air Systems Command and used at six Naval Aviation Depots.

Columbus Working Capital Fund (CO WCF). The Columbus Working Capital Fund initiative will focus on reengineering business processes, consolidating and standardizing systems, improving data accuracy, improving internal controls, integrating with other communities, and standardizing and warehousing data.

Fuels Automated System (FAS). The Fuels Automated System is a commercial-off-the-shelf package consisting of accounts payable, general ledger, accounts receivable, inventory accounting, purchasing, order entry, and alert modules. The open systems architecture and full integration supports a reduction in data redundancy, data inconsistency and reconciliation, duplicate data entry, paper handling, negative unliquidated obligations, and overpayments. In addition, it supports improved business practices through electronic commerce, decision support capability, processing and reporting capabilities, cash management controls, and budget and Program Objective Memorandum data.

Program Budget Accounting System-Funds Distribution (PBAS-FD). The Program Budget Accounting System-Funds Distribution is a DFAS migratory system used to distribute funds for the Office of the Secretary of Defense, Navy, and the Corps of Engineers. The Program Budget Accounting System-Funds Distribution customer base includes financial managers from the Defense Agencies and activities. The Office of the Secretary of Defense, Navy and the Corps of Engineers financial managers use the Program Budget Accounting System-Funds Distribution to electronically receive and issue funding. The Program Budget Accounting System-Funds Distribution prevents the over-distribution of funding and controls below threshold reprogramming based on limitations established by Congress.

DFAS Corporate Database (DCD). DCD is a central database that will allow accounting and finance information to be available to many users and applications at the same time. This central database will eliminate the storage of multiple instances of data and the inefficiencies and reconciliation processes that result when data are passed back and forth between applications. The DCD will incrementally integrate DFAS system initiatives while minimizing change to legacy applications. The DCD is required for the achieving the benefits

associated with major standardization initiatives, such as the Defense Procurement Payment System, Defense Cash Accountability System, the Defense Standard Disbursing System, and the Defense Departmental Reporting System. By integrating the entitlement, disbursing, and accounting data, the DCD should eliminate unmatched disbursements, negative unliquidated obligations, and the time delays associated with prevalidation.

Industrial Fund Accounting System (IFAS) - Information Services Business Area. As a result of an alternative analysis performed in September 1997, the recommendation was made to replace the current high-cost functionally and technically noncompliant Industrial Fund Accounting System with a commercial-off-the-shelf system. In response, the DFAS Program Management Office directed baseline comparison of Industrial Fund Accounting System functionality against the Defense Working Capital Accounting System. To identify functional gaps in the business processes, a customer-supported detailed functional analysis was performed for eight functional areas. Concurrently, a technical analysis was performed that included potential deficiencies in the technical infrastructure or environment. These studies resulted in identifying the gaps and development of the estimated cost for converting to a commercial-off-the-shelf system.

Upon completion of the analysis, the Industrial Fund Accounting System Executive Level Steering Group voted unanimously that the baseline Defense Working Capital Accounting System would be a good fit for the Information Services Business Area and requested an October 2000 conversion. Based on the customer enthusiasm and support during this effort and the identification of a 10-year life cycle savings of \$8.2 million, the Industrial Fund Accounting System Program Management Office requested approval for project continuation and funding to support the Information Services Business Area commercial-off-the-shelf conversion. DFAS Headquarters delayed the project because of a lack of funding available in the current Capital Budget. The Information Services Business Area commercial-off-the-shelf conversion is delayed until FY 2003.

Defense Logistics Agency Business System Modernization (DLA BSM). In July 1998, the Defense Integrated Subsistence Management System formed the Business System Modernization Steering Group. The Business System Modernization will replace the Defense Logistics Agency primary materiel management systems, the Standard Automated Materiel Management System, and the Defense Integrated Subsistence Management System, with expanded enterprise computing environment and commercial-off-the-shelf software packages.

The Standard Automated Materiel Management System is the first system slated to be replaced, to occur in the FY 2001 through FY 2003 timeframe, with the business-process improvement that will continue over the course of several years. After the Standard Automated Materiel Management System and the Defense Integrated Subsistence Management System are replaced, other Defense Logistics Agency legacy systems are expected to follow. Over the course of several years, the Business System Modernization strategy will result in new agency-wide processes that reflect best commercial business practices. Adopting new practices will contribute to improved military readiness by implementing a more interoperable and shared data environment. DFAS

entered into active participation on Integrated Product Teams in early 2000 and is currently participating in evaluations of vendor proposals, with an award expected in the third quarter of 2000.

Other Systems. Migratory systems for the Trust Fund (TRFND) and the Nonappropriated Funds (NAF) have not been defined.

DCII Disbursing

Defense Standard Disbursing System (DSDS). The Defense Standard Disbursing System is to be the single, standard DFAS migratory automated information system for disbursing, collecting, processing, and recording disbursement data and transactions. It will interact with existing entitlement, accounting, and U.S. Treasury reporting systems to provide disbursing capability.

Defense Debt Management System (DDMS). The Defense Debt Management System is a migratory DFAS automated financial management system developed to pursue debt collection efforts and recoup monies owed to government by both individuals who are out of service and delinquent contractors. The Defense Debt Management System provides online processing of debt cases using automated files. The system is complemented by the use of centralized interfaces between the various pay systems, where the majority of debts originate. The Defense Debt Management System also provides centralized automated processing of payments by debtors.

DCII Information Retrieval and Reporting

Defense Departmental Reporting System (DDRS). The Defense Departmental Reporting System is a DFAS migratory system currently under development that will satisfy the need for a financial management system to support the DoD appropriation level control, financial reporting, and financial analysis.

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense (Comptroller/Chief Financial Officer)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Command, Control, Communication, and Intelligence)

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller) Auditor General, Department of the Army

Department of the Navy

Naval Inspector General Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller) Auditor General, Department of the Air Force

Other Defense Organization

Director, Defense Finance and Accounting Service

Non-Defense Federal Organizations and Individuals

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Management, Information, and Technology,

Committee on Government Reform

House Subcommittee on National Security, Veterans Affairs, and International

Relations, Committee on Government Reform

Office of the Under Secretary of Defense (Comptroller/Chief Financial Officer) Comments



UNDER SECRETARY OF DEFENSE 1100 DEFENSE PENTAGON WASHINGTON, DC 20301-1100

NOV 3 2000

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING,
OFFICE OF THE INSPECTOR GENERAL, DEPARTMENT OF
DEFENSE

SUBJECT: Draft Audit Report on "Oversight of Defense Finance and Accounting Service Corporate Database Development" (Project No. D2000FG-0051)

This is a joint Office of the Under Secretary of Defense (Comptroller) (USD(C)) and Defense Finance and Accounting Service (DFAS) response to the subject draft report.

Comments that address the draft report's primary finding and recommendations to the USD(C) and the DFAS are attached.

We appreciate the opportunity to comment on the draft report. My staff point of contact on this matter is Mr. Gerald Thomas. He may be reached by e-mail: thomasg@osd.pentagon.mil or by telephone at (703) 602-0945.

Attachment

OFFICE OF THE INSPECTOR GENERAL DRAFT AUDIT REPORT "OVERSIGHT OF DEFENSE FINANCE AND ACCOUNTING SERVICE CORPORATE DATABASE DEVELOPMENT" DATED AUGUST 25, 2000 (PROJECT NO. D2000FG-0051)

OFFICE OF THE UNDER SECRETARY OF DEFENSE (COMPTROLLER)
AND
DEFENSE FINANCE AND ACCOUNTING SERVICE COMMENTS

GENERAL COMMENTS

The Department recently developed a comprehensive process to help oversee and manage its financial and feeder systems development and enhancement efforts on an integrated basis. As approved by the Defense Management Council (DMC), the Office of the Under Secretary of Defense (Comptroller) has developed a Financial and Feeder Systems Compliance Process ("the Process") to oversee and monitor the DoD Components' efforts to develop and modify critical finance, accounting, and feeder systems to comply with applicable requirements. The Process is patterned after the Department's successful "Y2K process" and consists of five phases with defined exit criteria. The goal of the Process is to ensure that each critical finance, accounting, and feeder system—both from single-system and integrated systems perspectives—is compliant with applicable federal financial management requirements. In turn, such compliance will enhance the capabilities of the systems (individually and collectively) to provide timely and accurate financial data to senior DoD managers, aid decisionmaking within the Department and help achieve favorable audit opinions on the Department's financial statements.

The oversight body for the Process will be the Senior Financial Management Oversight Council (SFMOC), which shall be chaired by the Under Secretary of Defense (Comptroller). Meetings of the SFMOC are planned to be held no less frequently than quarterly. A Systems Compliance Working Group will be formed and will be subordinate to the SFMOC. The SFMOC shall be chaired by a representative from the Office of the Under Secretary of Defense (Comptroller) and the Vice Chair shall be a representative from the Defense Finance and Accounting Service. The DoD Components will be responsible for satisfying the exit criteria for each phase of the Process.

COMMENTS ON RECOMMENDATIONS TO USD(C) AND DFAS

Recommendation 2a: The Under Secretary of Defense (Comptroller) complete guidance implementing the 1999 Financial Management Improvement Plan (FMIP) to include a requirement to use portfolio management.

1 of 2

OUSD(C) Response: The FMIP already requires the DoD Components to plan, develop, modify, enhance, and implement their financial and feeder systems in an integrated manner. Upon formal publication of guidance on family-of-systems ("portfolio management") and mission area reviews by the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD(C31)), we will evaluate such guidance to determine if any additional requirements are needed for the FMIP.

Recommendation 2b: The Under Secretary of Defense (Comptroller) establish a finance, accounting, and feeder systems portfolio(s) in coordination with the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) and assist in identification of applicable systems to include critical systems, such as the Defense Finance and Accounting Service Corporate Database, which do not meet cost-review thresholds. The Defense Finance and Accounting Service Corporate Information Infrastructure and Defense Finance and Accounting Service Corporate Database should be central to the portfolio(s).

OUSD(C) Response: Critical finance, accounting, and feeder systems, already are included in the FMIP regardless of cost-review thresholds. (Additionally, the Office of the Inspector General (OIG) agreed to review the Department's list of identified critical systems and advise whether the OIG believes the list to be complete and, if not, identify those additional systems that need to be added.) Upon formal publication of ASD(C3I) guidance on family-of-systems, we will evaluate such guidance to determine if any changes are needed in the Department's current approach to managing its financial and feeder systems on an integrated basis.

Recommendation 2c: The Under Secretary of Defense (Comptroller) require DoD Components to comply with the Defense Finance and Accounting Service direction on consolidation, standardization, and integration of DoD finance and accounting requirements, functions, procedures, operations, and systems contained in DoD Directive 5118.3, "USD(Comptroller) Chief Financial Officer, DoD," and 5118.5, "Defense Finance and Accounting Service."

<u>OUSD(C)</u> Response: The Department will reference DoD Directives 5118.3 and 5118.5 as applicable and appropriate when Memorandums of Agreement are established between the Defense Finance and Accounting Service and the owners of feeder systems under the Department's Financial and Feeder Systems Compliance Process.

Recommendation 2d: The Under Secretary of Defense (Comptroller) requires the Director, Defense Finance and Accounting Service, to show how systems under development or modernization will fit into the Defense Finance and Accounting Service Corporate Information Infrastructure architecture until they are reengineered.

OUSD(C) Response: The annual FMIP guidance includes the requirement for DFAS to provide information on the crosswalks necessary to translate nonstandard systems data into DCII-compliant formats until modernization and reengineering of the systems are complete. To accommodate feeder systems and migratory systems that have not yet been reengineered, DFAS intends to provide a crosswalking mechanism that will translate transactional data into the Defense Finance and Accounting Service Corporate Database (DCD) standard fiscal code format. This should provide: a) data standardization regardless of the system providing or using the data; b) standard edits regardless of which system uses the data; and, c) a universal application of business rules as applied to specific data. The mechanism should facilitate crosswalking of data between the DCII Common Environment and legacy systems (both feeder systems and nonreengineered systems.

Assistant Secretary of Defense for Command, Control, Communications, and Intelligence **Comments**



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE 6000 DEFENSE PENTAGON WASHINGTON, DC 20301-6000

November 2, 2000

MEMORANDUM FOR DIRECTOR, FINANCE AND ACCOUNTING, DoDIG

SUBJECT: Audit Report "Oversight of Defense Finance and Accounting Service Corporate Database Development" (Report No. D2000FG-0051)

Thank you for the opportunity to comment on the subject report. The recommendations directed to the ASD(C3I) and our replies to each are as follows:

 Establish a date for completion and publish guidance on portfolio management to include any consideration of Federal regulations and DoD requirements.

OASD(C3I) Response: Concur in principle. The recently-signed DoD Directive 5000.1 and DoD Instruction 5000.2 contain language for conducting family-of-systems (FoS) reviews and mission area reviews. These reviews are the first step toward institutionalizing the principles of portfolio management and oversight (PM&O) in DoD. OASD(C3I) will work with OUSD (AT&L) and others to develop procedures for FoS and mission area reviews for inclusion in the forthcoming update to DoDD 5000.2-R scheduled for signature this calendar year. We plan to issue overarching guidance for PM&O by the end of this fiscal year.

 Perform compliance reviews using the technical infrastructure model on a cost-effective basis for all systems and processes within the finance, accounting, and feeder system portfolio(s).

OASD(C3I) Response: OASD(C3I), in coordination with OUSD(Comptroller), will conduct family-of-systems (FoS) review(s) for systems and processes that support the finance and accounting mission/business area using, among other criteria, the technical infrastructure model as defined in the Financial Management Improvement Program.

 Perform assessments of compliance with the Defense Finance and Accounting Service Corporate Information Infrastructure for reviews of DoD finance, accounting, and feeder systems.

OASD(C3I) Response: Concur. OASD(C3I), in coordination with OUSD (Comptroller), will assess compliance with the Defense Finance and Accounting Corporate Information Infrastructure for reviews of the finance and accounting mission/business area.

Please direct questions to Dave Mullins at (703) 601-1244.

Gr Paul R. Brubaker Deputy Chief Information Officer

Audit Team Members

The Finance and Accounting Directorate, Office of the Assistant Inspector General for Auditing, DoD, produced this report.

F. Jay Lane Salvatore D. Guli Kimberley Caprio Eric Lewis Melissa McBride Cynthia Keller Sharon Carvalho

INTERNET DOCUMENT INFORMATION FORM

- A . Report Title: Oversight of Defense Finance and Accounting Service Corporate Database Development
- B. DATE Report Downloaded From the Internet: 01/04/01
- C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):

 OAIG-AUD (ATTN: AFTS Audit Suggestions)
 Inspector General, Department of Defense
 400 Army Navy Drive (Room 801)
 Arlington, VA 22202-2884
- D. Currently Applicable Classification Level: Unclassified
- **E. Distribution Statement A**: Approved for Public Release
- F. The foregoing information was compiled and provided by: DTIC-OCA, Initials: __VM__ Preparation Date 01/04/01

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.